

Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	CCL Container (Harrisonburg), Inc.
Facility Name:	CCL Container (Harrisonburg), Inc.
Facility Location:	810 North Main Street Harrisonburg, Virginia 22802
Registration Number:	80067
Permit Number:	VRO80067

August 3, 2001

Effective Date

March 26, 2002

Significant Permit Modification Date

September 26, 2002

Significant Permit Modification Date

August 3, 2006

Expiration Date

Director, Department of Environmental Quality

Signature Date

Table of Contents, 1 page.

Permit Conditions, 42 pages.

Source Testing Report Format.

Pollution Prevention Report Form.

Attachment A.

Table of Contents

I.	FACILITY INFORMATION	3
II.	EMISSION UNITS	4
III.	FACILITY WIDE CONDITIONS	9
A.	LIMITATIONS	9
B.	MONITORING	15
C.	RECORDKEEPING	20
D.	TESTING.....	23
E.	REPORTING.....	25
F.	NOTIFICATIONS.....	25
IV.	INSIGNIFICANT EMISSION UNITS	27
V.	PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	29
VI.	GENERAL CONDITIONS.....	30
A.	FEDERAL ENFORCEABILITY	30
B.	PERMIT EXPIRATION	30
C.	RECORDKEEPING AND REPORTING.....	31
D.	ANNUAL COMPLIANCE CERTIFICATION	32
E.	PERMIT DEVIATION REPORTING	33
F.	FAILURE/MALFUNCTION REPORTING	33
G.	SEVERABILITY	33
H.	DUTY TO COMPLY	33
I.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE	33
J.	PERMIT ACTION FOR CAUSE	34
K.	PROPERTY RIGHTS	34
L.	DUTY TO SUBMIT INFORMATION	35
M.	DUTY TO PAY PERMIT FEES.....	35
N.	FUGITIVE DUST EMISSION STANDARDS	35
O.	STARTUP, SHUTDOWN, AND MALFUNCTION.....	36
P.	ALTERNATIVE OPERATING SCENARIOS	36
Q.	INSPECTION AND ENTRY REQUIREMENTS	36
R.	REOPENING FOR CAUSE.....	37
S.	PERMIT AVAILABILITY	37
T.	TRANSFER OF PERMITS	37
U.	MALFUNCTION AS AN AFFIRMATIVE DEFENSE	38
V.	PERMIT REVOCATION OR TERMINATION FOR CAUSE	39
W.	DUTY TO SUPPLEMENT OR CORRECT APPLICATION.....	39
X.	STRATOSPHERIC OZONE PROTECTION	39
Y.	ACCIDENTAL RELEASE PREVENTION	39
Z.	CHANGES TO PERMITS FOR EMISSIONS TRADING.....	39
AA.	EMISSIONS TRADING	39
VII.	STATE-ONLY ENFORCEABLE REQUIREMENTS.....	41

I. Facility Information

Permittee

CCL Container (Harrisonburg), Inc.
810 North Main Street
Harrisonburg, Virginia 22802

Responsible Official

Mr. Joseph Froelich
Vice President & General Manager

Facility

CCL Container (Harrisonburg), Inc.
810 North Main Street
Harrisonburg, Virginia 22802

Contact Person

Mr. Bill Danielson
Manager of Engineering Services
(540) 434-4411

NET Identification Number: 51-660-0013

Facility Description:

SIC 3354 – Aluminum Extruded Products
SIC 3089 – Plastics Products, Not Elsewhere Classified
SIC 3099 – Miscellaneous Metal Parts

CCL Container (Harrisonburg), Inc. manufactures aluminum and tin squeeze tubes as well as aluminum metered dose inhaler (MDI) tubes. The tubes are extruded from metal sheets, annealed in gas-fired ovens and are coated. Coatings are applied to the interior and exterior surfaces and are cured in electric or gas-fired ovens. Plastic caps are also manufactured for some of the tubes.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date**
1	A-01-E-1 A-01-E-2	Aluminum Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1990)	25,000 tubes/day	-	-	-	06/21/02
4	A-04-E-1 A-04-E-2	Aluminum Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1986)	42,000 tubes/day	-	-	-	06/21/02
5	A-05-I-1 A-05-I-2 A-05-I-3 A-05-I-4 A-05-E-1 A-05-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1986)	30,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
7A	A-07-I-1 A-07-I-2 A-07-I-3 A-07-I-4 A-07-E-1 A-07-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1999)	85,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
8	A-08-I-1 A-08-I-2 A-08-I-3 A-08-I-4 A-08-E-1 A-08-E-2 A-08-E-3	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1986)	85,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
9	A-09-E-1 A-09-E-2 A-09-E-3	Aluminum Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1985)	120,000 tubes/day	-	-	-	06/21/02

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date**
10	A-10-I-1 A-10-I-2 A-10-I-3 A-10-I-4 A-10-E-1 A-10-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1987)	40,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
11	A-11-I-1 A-11-I-2 A-11-I-3 A-11-I-4 A-11-E-1 A-11-E-2 A-11-E-3 A-11-E-4 A-11-E-5	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1997)	100,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
12	A-12-I-1 A-12-I-2 A-12-I-3 A-12-I-4 A-12-E-1 A-12-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1990)	110,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
13	A-13-I-1 A-13-I-2 A-13-I-3 A-13-I-4 A-13-E-1 A-13-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1992)	110,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
14	A-14-I-1 A-14-I-2 A-14-I-3 A-14-I-4 A-14-E-1 A-14-E-2 A-14-E-3	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1993)	140,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal and exterior coating application)	C-1	VOC	

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date**
15	A-15-I-1 A-15-I-2 A-15-I-3 A-15-I-4 A-15-E-1 A-15-E-2	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 1999)	85,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal and exterior coating application)	C-1	VOC	
20	A-20-A A-20-I-1 A-20-I-2 A-20-I-3 A-20-E-1 A-20-E-2 A-20-E-3 A-20-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2001)	9,000 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	
21	A-21-A A-21-I-1 A-21-I-2 A-21-I-3 A-21-E-1 A-21-E-2 A-21-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2001)	9,000 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	
22	A-22-A A-22-I-1 A-22-I-2 A-22-I-3 A-22-I-4 A-22-E-1 A-22-E-2 A-22-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2002)	9,000 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date**
23	A-23-A A-23-I-1 A-23-I-2 A-23-I-3 A-23-E-1 A-23-E-2 A-23-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2002)	10,800 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	
24	A-24-A A-24-I-1 A-24-I-2 A-24-E-1 A-24-E-2 A-24-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2001)	10,800 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	
25	A-25-A A-25-I-1 A-25-I-2 A-25-I-3 A-25-E-1 A-25-E-2 A-25-D	Aluminum Tube Line Equipped with an Internal Coating System, an Outside Enamel System, and a Decorating System (installed 2002)	9,000 tubes/hour	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
				Permanent total enclosures & thermal oxidizer (internal coating application)	C-1	VOC	
6	M-06-I-1 M-06-I-2 M-06-I-3 M-06-I-4	Metered Dose Inhaler Line Equipped with an Internal Coating System (installed 1985)	20,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
18	M-18-I-1 M-18-I-2 M-18-I-3 M-18-I-4	Metered Dose Inhaler Line Equipped with an Internal Coating System (installed 1985)	75,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02
19	M-19-I-1 M-19-I-2 M-19-I-3	Metered Dose Inhaler Line Equipped with an Internal Coating System (installed 1985)	153,000 tubes/day	Dry paint filters (internal coating application)	-	PM PM-10	06/21/02

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date**
K-8	K-8-E-1 K-8-E-2 K-8-D	Tin Tube Line Equipped with an Outside Enamel System and a Decorating System (to be installed 2002)	9,000 tubes/hour	-	-	-	06/21/02
31	T-31-E-1	Tin Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1998)	60,000 tubes/day	-	-	-	06/21/02
32	T-32-E-1	Tin Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1985)	40,000 tubes/day	-	-	-	06/21/02
33	T-33-E-1	Tin Tube Line Equipped with an Outside Enamel System and a Decorating System (installed 1998)	35,000 tubes/day	-	-	-	06/21/02

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

** The applicable permits are Minor NSR permit dated 06/21/02 and State Operating Permit (SOP) dated 06/21/02.

III. Facility Wide Conditions

A. Limitations

1. The existing aluminum tube line 7 shall be replaced with the new aluminum tube line 7A. Reactivation of aluminum tube line 7 may require a permit.
(9 VAC 5-80-110 and Condition 3 of Minor NSR Permit dated 06/21/02)
2. Particulate emissions from the interior coating applicators shall be controlled by dry paint filters. The dry paint filters shall be provided with adequate access for inspection and shall be in operation when the interior coating applicators are operating.
(9 VAC 5-80-110 and Condition 4 of Minor NSR Permit dated 06/21/02)
3. Volatile organic compound (VOC) emissions from interior coating operations on the lines (Lines 14, 15, and 20 – 25), and from exterior coating operations on the lines 14 and 15 shall be controlled by permanent total enclosures and a thermal oxidizer. The thermal oxidizer shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 5 of Minor NSR Permit dated 06/21/02)
4. The thermal oxidizer shall maintain a control efficiency for VOC emissions of no less than 95%.
(9 VAC 5-80-110 and Condition 6 of Minor NSR Permit dated 06/21/02)
5. The thermal oxidizer shall maintain a minimum combustion zone temperature equal to or higher than that determined during the performance testing required by Condition III.D.2 and a residence time of at least 0.4 second. The minimum combustion zone temperature shall be calculated as a three hour average. Details concerning the method of calculating the three hour average combustion zone temperature shall be arranged with the Director, Valley Region.
(9 VAC 5-80-110 and Condition 7 of Minor NSR Permit dated 06/21/02)
6. Upon startup of the thermal oxidizer, the interior coating operations on the Lines 14, 15, and 20 – 25 shall not be operated more than 500 hours per year without the thermal oxidizer being operated. Annual hours of operation without the thermal oxidizer shall be calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 8 of Minor NSR Permit dated 06/21/02)
7. The total enclosures shall have a capture efficiency of 100% as determined by EPA Method 204 (reference 40 CFR 51, Appendix M), or alternate methods as approved by the DEQ).
(9 VAC 5-80-110 and Condition 9 of Minor NSR Permit dated 06/21/02)

8. Each total enclosure shall meet the following criteria:
- Any natural draft openings shall be at least 4 equivalent opening diameters from each VOC emitting point.
 - The total area of all natural draft openings shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling.
 - The average facial velocity of air through the natural draft openings shall be at least 200 feet per minute and the direction of flow shall be into the enclosure.
 - All access doors and windows shall be closed during routine operation of the interior coating operations on the lines (Lines 14, 15, and 20 – 25), and exterior coating operations on the lines 14 and 15.
 - All of the exhaust gases from the enclosure shall be directed to the thermal oxidizer during interior coating operations.

(9 VAC 5-80-110 and Condition 10 of Minor NSR Permit dated 06/21/02)

9. VOC emissions from cleaning or purging operations shall be minimized by the adjustment of production schedules to minimize coating changes.

(9 VAC 5-80-110 and Condition 12 of Minor NSR Permit dated 06/21/02)

10. VOC emissions from coating application in the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 – 25, and 31 – 33, and K-8) shall not exceed the following limits, excluding water. For exterior and interior coatings (except MDI), these limits shall be calculated after controls, where applicable, and as delivered to a coating applicator where controls are not used. For MDI interior coatings and inks, these limits shall be calculated as they are delivered to a coating applicator:

	Monthly Average (lb/gal)	12 Month Rolling Average (lb/gal)
Exterior Coatings	3.00	2.80
Internal Coatings (except MDI)	3.75	3.50
MDI Interior Coatings	6.50	6.50
Inks	3.00	3.00

Compliance shall be determined on a monthly weighted average basis within a coating category. The permittee shall begin calculating the 12 month rolling average on August 1, 2002. Thereafter, the 12 month rolling average shall be calculated monthly.

(9 VAC 5-80-110 and Condition 13 of Minor NSR Permit dated 06/21/02)

11. VOC shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-80-110 and Condition 14 of Minor NSR Permit dated 06/21/02)
12. The throughput of VOC to the lines (Lines 1, 4, 5, 7A, 8 – 15, 20 - 25, and 31 – 33) from aluminum and tin tube interior coatings shall not exceed 195.94 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 16 of Minor NSR Permit dated 06/21/02)
13. The throughput of VOC from metered dose inhaler interior coatings shall not exceed 14.27 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 17 of Minor NSR Permit dated 06/21/02)
14. The throughput of VOC to the lines (Lines 1, 4 – 6, 7A, 8 – 13, 18, 19, and 31 – 33) from exterior coatings shall not exceed 39.38 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 18 of Minor NSR Permit dated 06/21/02)
15. The throughput of VOC to the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 - 25, 31 – 33, and K-8) from organic cleaning solvents shall not exceed 61.8 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 19 of Minor NSR Permit dated 06/21/02)
16. The throughput of VOC to the new lines (Lines 20 – 25 and K-8) from ink shall not exceed 2.25 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 20 of Minor NSR Permit dated 06/21/02)
17. The throughput of VOC from external coatings to Line 22 shall not exceed 14.5 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 21 of Minor NSR Permit dated 06/21/02)
18. The throughput of VOC from external coatings to Line 23 shall not exceed 14.5 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 22 of Minor NSR Permit dated 06/21/02)
19. The throughput of VOC from external coatings to Line 24 shall not exceed 14.1 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 23 of Minor NSR Permit dated 06/21/02)
20. The throughput of VOC from external coatings to Line 25 shall not exceed 14.5 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 24 of Minor NSR Permit dated 06/21/02)

21. The throughput of VOC from external coatings to Line 20 shall not exceed 14.5 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 25 of Minor NSR Permit dated 06/21/02)
22. The throughput of VOC from external coatings to Line 21 shall not exceed 14.5 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 26 of Minor NSR Permit dated 06/21/02)
23. The throughput of VOC from external coatings to Line K-8 shall not exceed 8.4 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition 27 of Minor NSR Permit dated 06/21/02)
24. The approved fuel for the thermal oxidizer is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 28 of Minor NSR Permit dated 06/21/02)
25. Emissions from the operation of the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 - 25, 31 – 33, and K-8) shall not exceed the limits specified below:

Particulate Matter	7.60 lbs/hr	14.5 tons/yr
PM-10	7.60 lbs/hr	14.5 tons/yr
Volatile Organic Compounds		215.00 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 29 of Minor NSR Permit dated 06/21/02)

26. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 7A shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 30 of Minor NSR Permit dated 06/21/02)
27. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 15 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 31 of Minor NSR Permit dated 06/21/02)

28. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 22 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 32 of Minor NSR Permit dated 06/21/02)
29. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 23 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 33 of Minor NSR Permit dated 06/21/02)
30. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 24 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 34 of Minor NSR Permit dated 06/21/02)
31. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 25 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 35 of Minor NSR Permit dated 06/21/02)
32. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 20 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-110 and Condition 36 of Minor NSR Permit dated 06/21/02)
33. Hazardous air pollutant (HAP) emissions, as defined by ' 112(b) of the Clean Air Act, from Line 21 shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12

month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.

(9 VAC 5-80-110 and Condition 37 of Minor NSR Permit dated 06/21/02)

34. Visible emissions from each interior spray coating application on the existing lines (Lines 1, 4 – 6, 7A, 8 – 13, 18, 19, and 31 – 33) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 38 of Minor NSR Permit dated 06/21/02)
35. Visible emissions from the thermal oxidizer shall not exceed 5% opacity as determined by EPA Method 9 (Reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 39 of Minor NSR Permit dated 06/21/02)
36. The portions of this permit to install Line K-8 shall become invalid, unless an extension is granted by the DEQ, if:
- a. A program of continuous installation is not commenced before the latest of the following:
 - (1) 18 months from June 21, 2002.
 - (2) Nine months from the date that the last permit or other authorization was issued from any other governmental agency.
 - (3) Nine months from the date of the last resolution of any litigation concerning any such permits or authorization.
 - b. A program of installation is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
- (9 VAC 5-80-110 and Condition 54 of Minor NSR Permit dated 06/21/02)
37. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.

- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110 and Condition 58 of Minor NSR Permit dated 06/21/02)

38. The processes listed below shall, upon request of the Department, shut down immediately if its emissions increase in any amount because of a bypass, malfunction, shutdown or failure of the process or its associated air pollution control equipment. The processes shall not return to operation until it and the associated air pollution control equipment are able to operate in the proper manner.

- a. Line 1
- b. Lines 4 - 6
- c. Line 7A
- d. Lines 8 - 15
- e. Lines 18 - 19
- f. Lines 31 - 33
- g. Lines 22 - 25
- h. Lines 20, 21 and K-8

(9 VAC 5-80-110 and Condition 56 of Minor NSR Permit dated 06/21/02)

B. Monitoring

- 1. The permittee shall perform inspections of the dry paint filter on each interior coating applicator each day of operation of the interior coating applicator. The inspections shall include a check of correct filter placement and filter condition.
(9 VAC 5-80-110)

2. For the purpose of calculating VOC emissions, the VOC content of each material (including internal coatings, external coatings, MDI coatings, inks, and organic cleaning solvents), as applied, shall be based on formulation data as shown on its certified Material Safety Data Sheet (MSDS). If the VOC content is given as a range, the maximum value shall be used.
(9 VAC 5-80-110)
3. The thermal oxidizer shall be equipped with devices to continuously measure and record the combustion zone temperature. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the thermal oxidizer is operating.
(9 VAC 5-80-110 and Condition 11 of Minor NSR Permit dated 06/21/02)
4. The permittee shall determine compliance with the particulate matter and PM-10 emission limits in Conditions III.A.25 as follows:
 - a. To calculate particulate emissions on a monthly or annual basis:

$$E = \left(\sum_{i=1}^n \left(\frac{P_i}{100} \right) G_i D_i \right) \left(\frac{100-T}{100} \right) \left(\frac{100-CE}{100} \right)$$

..... Equation 1

Where:

- | | | |
|----------------|---|---|
| E | = | Particulate emission rate (lb/time period) |
| P _i | = | Solids content of each interior coating [including MDI Coatings, if applicable] (i) applied during the time period (%) |
| G _i | = | Number of gallons of each interior coating [including MDI Coatings, if applicable] (i) applied during the time period (gal/time period) |
| D _i | = | Density of each interior coating [including MDI Coatings, if applicable] (i) applied during the time period (lb/gal) |
| T | = | Transfer efficiency of the coating spray applicators (%) |
| | = | 50 [unless records demonstrate a different value] |
| CE | = | Control efficiency of the dry paint filter (%) |
| | = | 85 [unless records demonstrate a different value] |

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

- b. To calculate average hourly emission rates:

$$PE = \frac{E}{H}$$

..... Equation 2

Where:

- PE = Average hourly particulate emission rate (lb/hr)
 E = Particulate emission rate (lb/month)
 H = Combined hours of operation of all interior spray coating applicators [including MDI applicators, if applicable] (hr/month)

Average hourly particulate emissions shall be calculated once each month.

(9 VAC 5-80-110 and Condition 46 of Minor NSR Permit dated 06/21/02)

5. The permittee shall use the following equation to determine compliance with the monthly average VOC content limits in Conditions III.A.10:

$$AC = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n G_i}$$

..... Equation 3

Where:

- AC = Average VOC content of coatings within a coating category (lb/gal)
 C_i = VOC content of each coating (i), excluding water, within a coating category emitted during each month (lb/gal). For exterior and interior coatings (except MDI), VOC content shall be calculated after controls, where applicable, and as delivered to a coating applicator where controls are not used. For MDI interior coatings and inks, VOC content shall be calculated as delivered to a coating applicator.
 G_i = Number of gallons of each coating (i) within a coating category applied during each month (gal)

(9 VAC 5-80-110 and Condition 45 of Minor NSR Permit dated 06/21/02)

6. The permittee shall determine compliance with the VOC limit in Condition III.A.25 as follows:

a. To calculate VOC emissions from Lines 1, 4-6, 7A, 8-13, 18, 19, 31-33 and K-8:

$$VE = \left(\sum_{i=1}^n C_i G_i \right) - V_R$$

..... Equation 4

Where:

- VE = VOC emission rate (lb/time period)
- C_I = VOC content of each coating [including interior, exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period (lb/gal)
- G_I = Number of gallons of each coating [including interior, exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period (gal)
- V_R = VOC recovered and sent off-site (lbs/time period)

b. To calculate VOC emissions from Lines 14 and 15:

$$VE = \left(\sum_{i=1}^n C_i G_i \right) + \left(\left(\sum_{i=1}^n I_i U_i \right) \left(\frac{100 - CE}{100} \right) \right) - V_R$$

..... Equation 5

Where:

- VE = VOC emission rate (lb/time period)
- C_I = VOC content of each coating [including exterior and inks] and organic cleaning solvent (i) utilized during the time period (lb/gal)
- G_I = Number of gallons of each coating [including exterior and inks] and organic cleaning solvent (i) utilized during the time period (gal)
- I_I = VOC content of each interior coating (I) utilized during the time period (lb/gal)
- U_I = Number of gallons of each interior coating (i) utilized during the time period (gal)

CE = Control efficiency of the thermal oxidizer (%)
 = 90

V_R = VOC recovered and sent off-site (lbs/time period)

c. To calculate VOC emissions from lines (Lines 20 - 25):

$$VE = \left(\sum_{i=1}^n C_i G_i \right) + \left(\left(\sum_{i=1}^n I_i U_i \right) \left(\frac{100 - CE}{100} \right) \right) - V_R$$

..... Equation 6

Where:

VE = VOC emission rate (lb/time period)

C_i = VOC content of each coating [including exterior and inks] and organic cleaning solvent (i) utilized during the time period (lb/gal)

G_i = Number of gallons of each coating [including exterior and inks] and organic cleaning solvent (i) utilized during the time period (gal)

I_i = VOC content of each interior coating (i) utilized during the time period (lb/gal)

U_i = Number of gallons of each interior coating (I) utilized during the time period (gal)

CE = Control efficiency of the thermal oxidizer (%)
 = 90

V_R = VOC recovered and sent off-site (lbs/time period)

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 47 of Minor NSR Permit dated 06/21/02)

7. The permittee shall determine compliance with the HAP limits in Conditions III.A.26 – III.A.33 as follows:

a. To determine monthly or annual emission rates of individual HAPs:

$$E_t = \sum_{i=1}^n C_i T_i + I_i U_i + ((V_i A_i) \left(\frac{100 - CE}{100} \right))$$

..... Equation 7

Where:

E_t = Emission rate of HAP (t) [lb/time period]

C_i = Content of HAP (t) in each coating [including exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period [lb/gal]

T_i = Number of gallons of each coating [including exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period [gal]

I_i = Content of HAP (t) in each interior coating (i) used in Line 7A during the time period [lb/gal]

U_i = Number of gallons of each interior coating (i) used in Line 7A during the time period [gal]

V_i = Content of HAP (t) in each interior coating (i) used in Lines 15 and 20 – 25 during the time period [lb/gal]

A_i = Number of gallons of each interior coating (i) used in Lines 15 and 20 – 25 during the time period [gal]

CE = Control efficiency of the thermal oxidizer
= 90

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

b. To determine total HAP emissions:

$$\sum_{t=1}^n E_t$$

..... Equation 8

Where:

E_t = Emission rate of HAP (t) [lb/time period]

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Daily records of the amount (in gallons) of each coating, ink, and organic cleaning solvents issued from storage.
2. Monthly and annual throughput (in gallons) of each coating, ink, and organic cleaning solvents used in each of the existing lines (Lines 1, 4 – 6, 7A, 8 – 15, 18, 19, and 31 – 33). Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
3. Monthly and annual VOC throughput (in tons) of each coating and organic cleaning solvent used in each of the existing lines (Lines 1, 4 – 6, 7A, 8 – 15, 18, 19, and 31 – 33). Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
4. Monthly and annual throughput (in gallons) of each coating, ink, and organic cleaning solvent used in each of the new lines (Lines 20 – 25 and K-8). Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
5. Monthly and annual VOC throughput (in tons) of each internal coating, ink, and organic cleaning solvent used in each of the new lines (Lines 20 – 25 and K-8). Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
6. Monthly and annual VOC throughput from external coatings (in tons) to Line 25. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
7. Monthly and annual VOC throughput from external coatings (in tons) to Line 22. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
8. Monthly and annual VOC throughput from external coatings (in tons) to Line 23. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
9. Monthly and annual VOC throughput from external coatings (in tons) to Line 24. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
10. Monthly and annual VOC throughput from external coatings (in tons) to Line 20. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
11. Monthly and annual VOC throughput from external coatings (in tons) to Line 21. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.

12. Monthly and annual VOC throughput from external coatings (in tons) to Line K-8. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
13. Monthly and annual VOC recovered from the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 – 25, 31 – 33, and K-8) and sent off-site (in tons). VOC recovered and sent off-site shall be calculated monthly as the sum of each consecutive 12 month period.
14. Monthly and annual VOC emissions (in tons) from coating, ink, and organic cleaning solvent usage in the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 – 25, 31 – 33, and K-8). VOC emissions shall be calculated as shown in Condition III.B.6. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
15. Monthly and annual calculations showing compliance with the VOC content limits in Conditions III.A.10. VOC content shall be calculated as shown in Condition III.B.5.
16. Average hourly, monthly, and annual particulate emissions from interior coating and MDI coating operations on the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 – 25, 31 – 33, and K-8). Particulate emissions shall be calculated as shown in Condition III.B.4. Average hourly emissions shall be calculated monthly. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
17. Total hours that each manufacturing line operates on a monthly basis.
18. Material Safety Data Sheets (MSDS) or other vendor information showing VOC content, toxic compound content, water content, and solids content for each coating and organic cleaning solution used.
19. Monthly and annual emissions to verify compliance with the individual and total HAP emission limitations for Lines 7A, 15, and 20 – 25 in Conditions III.A.26 – III.A.33. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
20. DEQ approved documentation demonstrating the removal efficiency of the filters utilized to control particulate emissions from the interior coating spray applicators if a value other than 85% is utilized for calculations.
21. DEQ approved documentation demonstrating the transfer efficiency of the interior coating spray applicators if a value other than 50% is utilized for calculations.
22. Average combustion zone temperature of any three hour period (during actual interior coating application) during which the average combustion zone temperature of the thermal oxidizer is below the minimum combustion zone temperature established during the performance test.
23. Total hours that the thermal oxidizer operates on a monthly basis.

24. Strip charts showing the combustion zone temperature for the thermal oxidizer.

25. Results of all stack tests, visible emission evaluations, and total enclosure verifications.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 48 of Minor NSR Permit dated 06/21/02)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested.

(9 VAC 5-80-110 and Condition 15 of Minor NSR Permit dated 06/21/02)

2. Initial performance tests shall be conducted for VOC emissions from the thermal oxidizer to determine compliance with the control efficiency requirements contained in Condition III.A.4. The results of the performance tests shall be used to establish appropriate operating parameter ranges for the thermal oxidizer, including the minimum combustion zone temperature necessary to achieve the destruction efficiency contained in Condition III.A.4. Upon approval by DEQ, appropriate parameters based upon performance testing, to include minimum combustion zone temperature, shall be incorporated into Condition III.A.5 by reference. The tests shall be performed, and demonstrate compliance, within 60 days after achieving the maximum production rate at which the new lines will be operated but in no event later than 180 days after startup of the final new line (of Lines 20 – 25). Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in 40 CFR 60, Appendix A. The details of the tests are to be arranged with the Director, Valley Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110 and Condition 40 of Minor NSR Permit dated 06/21/02)

3. Verification, in accordance with 40 CFR 51, Appendix M, Method 204, shall be performed on each enclosure for the interior coating operations on the lines (Lines 14, 15, and 20 – 25) and for the exterior coating operations on the lines 14 and 15 to determine compliance with the permanent total enclosure requirements and criteria in Conditions III.A.7 and III.A.8. The verification shall be performed on the enclosure for each line, and demonstrate compliance, within 60 days after achieving the maximum production rate at which the line will be operated but in no event later than 180 days after startup of the line. The details of the verification are to be arranged with the Director, Valley Region.

(9 VAC 5-80-110 and Condition 41 of Minor NSR Permit dated 06/21/02)

4. Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the thermal oxidizer. Each test shall consist of thirty sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Valley Region. The evaluation shall be performed, and demonstrate compliance, within 60 days after achieving the maximum production rate at which the new lines will be operated but in no event later than 180 days after startup of the final new line (of Lines 20 – 25). Should conditions prevent concurrent opacity observations, the Director, Valley Region, shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Valley Region, within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 42 of Minor NSR Permit dated 06/21/02)
5. Upon request by the DEQ, the permittee shall conduct additional performance tests for VOC emissions from the thermal oxidizer to demonstrate compliance with the emission limits and control efficiency requirements contained in this permit. The details of the tests shall be arranged with the Director, Valley Region.
(9 VAC 5-80-110 and Condition 43 of Minor NSR Permit dated 06/21/02)
6. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations on the thermal oxidizer to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Valley Region.
(9 VAC 5-80-110 and Condition 44 of Minor NSR Permit dated 06/21/02)
7. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
VOC	40 CFR Part 60, Appendix A, EPA Methods 18, 25, 25a
VOC Content	40 CFR Part 60, Appendix A, EPA Methods 24, 24a
PM/PM-10	40 CFR Part 60, Appendix A, EPA Methods 5, 17
Visible Emission	40 CFR Part 60, Appendix A, EPA Method 9
Hazardous Air Pollutants (HAPs) Content	40 CFR Part 63, Appendix A, EPA Method 311
Solids Content & Density of Coatings	40 CFR Part 60, Appendix A, EPA Method 24

(9 VAC 5-80-110)

E. Reporting

1. The permittee shall submit semi-annual reports to the Director, Valley Region, within 30 days after the end of the semi-annual period. The report shall include:
 - a. Monthly and annual throughput (in gallons) of each coating, ink, and organic cleaning solvent used in the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 - 25, 31 – 33, and K-8) during the semi-annual reporting period. Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
 - b. Monthly and annual calculations of weighted average VOC content for each coating category (interior, exterior, and MDI) utilized in the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 - 25, 31 – 33 and K-8) during the semi-annual reporting period.
 - c. Monthly and annual VOC emissions from the lines (Lines 1, 4 – 6, 7A, 8 – 15, 18 - 25, 31 – 33 and K-8) for each month during the semi-annual reporting period. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
 - d. For the thermal oxidizer, any three-hour period (during actual interior coating application) during which the average combustion zone temperature is below the minimum combustion zone temperature established during the performance test.
 - e. Total hours of operation of the thermal oxidizer during the semi-annual reporting period.
 - f. Total hours of operation of the new lines (Lines 20 – 25 and K-8) during the semi-annual period.

(9 VAC 5-80-110 and Condition 49 of Minor NSR Permit dated 06/21/02)

2. The permittee shall submit semi-annual pollution prevention reports to the Director, Valley Region. The reports shall be submitted within 30 days after the end of the reporting periods ending June 30 and December 31 and shall conform to the pollution prevention report form enclosed with this permit. This report may be combined with the semi-annual report required in Condition III.E.1.
(9 VAC 5-80-110 and Condition 50 of Minor NSR Permit dated 06/21/02)

F. Notifications

1. The permittee shall furnish written notification of the following to the Director, Valley Region:

- a. The actual date on which installation of line K-8 commenced within 30 days after such date.
- b. The actual startup date of each line within 15 days after such date.
- c. The anticipated date of the performance tests and visible emission evaluations of the thermal oxidizer postmarked at least 30 days prior to such date.
- d. The anticipated date of each total enclosure verification postmarked at least 30 days prior to such date.
- e. The completion of total enclosure and routing of emissions from exterior coating operations of lines 14 and 15 to the control device, within 15 days after such date.

(9 VAC 5-80-110 and Condition 51 of Minor NSR Permit dated 06/21/02)

- 2. The permittee shall furnish notification to the Director, Valley Region, of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
 - a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number.
 - b. The expected length of time that the air pollution control equipment will be out of service.
 - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period.
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110 and Condition 52 of Minor NSR Permit dated 06/21/02)

IV. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
BF1 - 10	General Building Ventilation Fans (multiple)	9 VAC 5-80-720 A	-	-
IM1 - 17	17 Injection Molding Machines for making polyethylene and polypropylene caps	9 VAC 5-80-720 B	VOC	-
IMR1 - 17	17 Re grind Systems for Injection Molding Machines	9 VAC 5-80-720 B	PM-10	-
Ink1	Ink Mixer	9 VAC 5-80-720 B	VOC	-
LH1 - 2	Lab Hoods for quality control work	9 VAC 5-80-720 A	-	-
AST1 - 14	14 Aluminum Slug Tumblers	9 VAC 5-80-720 B	PM-10	-
AST15	Aluminum Slug Tumbler	9 VAC 5-80-720 B	PM-10	-
PCT1 - 4	Four Solvent Cleaning Tanks for cleaning tools	9 VAC 5-80-720 B	VOC	-
AO1 - 10	10 Annealing Ovens, electric	9 VAC 5-80-720 B	PM-10	-
A08	Natural Gas Annealing Oven	9 VAC 5-80-720 C	-	0.24 mmBTU/hr
PV1 - 15	15 Press Vents, one per line	9 VAC 5-80-720 B	PM-10	-
TV1 - 15	15 Trimmer Bag Houses, one per line	9 VAC 5-80-720 B	PM-10	-
SH1 - 20	20 Natural Gas Space Heaters	9 VAC 5-80-720 C	-	0.4 mmBTU/hr each
MDISC1 - 3	Three Solvent Cleaning Stations in MDI area	9 VAC 5-80-720 B	VOC	-
WH1	Welding Hood	9 VAC 5-80-720 B	PM-10	-
GR1	Grinder with Hood	9 VAC 5-80-720 B	PM-10	-
FSR1 - 2	Two Flammable Liquid Storage Rooms (closed containers)	9 VAC 5-80-720 B	VOC	-
FSC1	Flammable Liquid Storage Cabinet (closed containers)	9 VAC 5-80-720 B	VOC	-
PDS1	Paint Distribution System	9 VAC 5-80-720 B	VOC	-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
TST1	Tin Slug Tumbler Vent	9 VAC 5-80-720 B	Methylene Chloride	-
BLR	Natural Gas-Fired Hot Water Heater	9 VAC 5-80-720 C	-	0.63 mmBTU/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

V. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified.		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VI. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Region, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VI.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Valley Region, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown.

(9 VAC 5-20-180 and Condition 53 of Minor NSR Permit dated 06/21/02)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-110 G.4)
2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
 - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
 - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
 - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
 - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
 - g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

VII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

- A. Emissions from the metal tube and container manufacturing facility shall not exceed the limits specified below:

Formaldehyde	0.08 lb/hr	0.174 ton/yr
Glycol Ethers	22.70 lbs/hr	99.00 tons/yr
Isophorone	1.20 lbs/hr	
Methyl Isobutyl Ketone	10.12 lbs/hr	27.72 tons/yr
Methylene Chloride	11.48 lbs/hr	25.20 tons/yr
Naphthalene	4.20 lbs/hr	13.53 tons/yr
Phenol	1.25 lbs/hr	2.74 tons/yr
Toluene	18.60 lbs/hr	54.60 tons/yr
Xylenes	21.40 lbs/hr	62.90 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110 N, 9 VAC 5-80-300, and Condition 1 of SOP Permit dated 06/21/02)

- B. As of the date of this permit, the permittee is limited to use of the following hazardous air pollutants (HAPs) in the metal tube and container manufacturing facility:

<u>Volatile Toxic Compounds</u>	<u>CAS Number</u>
Benzene	71-43-2
o-Cresol	95-48-7
Cumene	98-82-8
Ethylbenzene	100-41-4
Ethylene Glycol	107-21-1
Formaldehyde	50-00-0
Glycol Ethers	-
Isophorone	78-59-1
Methyl Ethyl Ketone	78-93-3
Methyl Isobutyl Ketone	108-10-1
Naphthalene	91-20-3

<u>Volatile Toxic Compounds</u>	<u>CAS Number</u>
Phenol	108-95-2
Toluene	108-88-3
Xylenes (mixed isomers)	1330-20-7
<u>Other Toxic Compounds</u>	<u>CAS Number</u>
Methylene Chloride	75-09-2

The permittee may use additional toxic compounds (listed in Attachment A) in the metal tube and container manufacturing facility under 9 VAC 5-60-300 C without obtaining a new permit provided the following conditions are met:

1. Notification shall be given to the Director, Valley Region. Such notification shall be made within 15 days after the use of additional toxic compounds and shall include identification of the toxic compound, the date the toxic compound was first used, and the anticipated maximum throughput of that compound in lbs/hr and tons/yr. Additional details of the notification should be arranged with the Director, Valley Region.
2. The permittee shall operate this facility in compliance with 9 VAC Chapter 60, Article 5, for all toxic compounds.
3. The permittee shall not use any hazardous air pollutant which would make the facility subject to federal emission standards in 40 CFR 61 or 40 CFR 63.
4. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional toxic compound may result in enforcement action.

(9 VAC 5-80-110 N, 9 VAC 5-80-300, and Condition 2 of SOP Permit dated 06/21/02)

- C. The permittee shall determine compliance with the toxic compound emission limits in Condition VII.A. as follows:

1. To calculate toxic compound emissions on a monthly or annual basis:

$$E_t = \sum_{i=1}^n C_i T_i + I_i U_i + ((V_i A_i) \left(\frac{100 - CE}{100} \right))$$

..... Equation 9

Where:

E_t = Emission rate of toxic compound (t) [lb/time period]

C_i = Content of toxic compound (t) in each coating [including exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period [lb/gal]

- T_I = Number of gallons of each coating [including exterior, MDI, and inks] and organic cleaning solvent (i) utilized during the time period [gal]
- I_I = Content of toxic compound (t) in each interior coating (i) used in Lines 1, 4 – 6, 7A, 8 – 13, 18, 19, and 31 – 33 during the time period [lb/gal]
- U_I = Number of gallons of each interior coating (i) used in Lines 1, 4 – 6, 7A, 8 – 13, 18, 19, and 31 – 33 during the time period [gal]
- V_I = Content of toxic compound (t) in each interior coating (i) used in Lines 14, 15, and 20 – 25 during the time period [lb/gal]
- A_I = Number of gallons of each interior coating (i) used in Lines 14, 15, and 20 – 25 during the time period [gal]
- CE = Control efficiency of the thermal oxidizer
= 90

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

2. To calculate average hourly emission rates:

$$HE_t = \frac{E_t}{H}$$

..... Equation 10

Where:

- HE_t = Average hourly emission rate for toxic compound (t) [lb/hr]
- E_t = Emission rate of toxic compound (t) [lb/month]
- H = Combined number of hours of operation of all manufacturing lines during the month [hr/month]

Average hourly toxic compound emissions shall be calculated once each month.

(9 VAC 5-80-110 N, 9 VAC 5-80-300, and Condition 3 of SOP Permit dated 06/21/02)

- D. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Daily records of the amount (in gallons) of each coating, ink, and organic cleaning solvents issued from storage.
2. Monthly and annual throughput (in gallons) of each coating, ink, and organic cleaning solvents used. Annual throughputs shall be calculated monthly as the sum of each consecutive 12 month period.
3. Total hours that each manufacturing line operates on a monthly basis.
4. Material Safety Data Sheets (MSDS) or other vendor information showing VOC content, toxic compound content, water content, and solids content for each coating and organic cleaning solution used.
5. Average hourly, monthly and annual emissions (in pounds) of each toxic compound listed or subsequently approved under Condition VII.B. Toxic compound emissions shall be calculated as shown in Condition VII.C. Average hourly emissions shall be calculated monthly. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

These records shall be available for inspection by the DEQ and shall be current for at least the most recent five years.

(9 VAC 5-80-110 N, 9 VAC 5-80-300, and Condition 4 of SOP Permit dated 06/21/02)